

WIDESCREEN NOTEBOOKS

INTRODUCTION

Notebooks were originally designed for business use, and had displays that were suited to running software such as word processors and spreadsheets. Today, however, you're just as likely to use a notebook computer to watch a DVD or edit digital photos. If you're going to use your notebook for entertainment, a widescreen display is ideal.

For this test we gathered nine of the latest widescreen notebook computers, with prices starting from as low as £770 including VAT. All have powerful processors, large hard disks and DVD writers. Two even use Intel's latest Core Duo processors for outstanding performance in intensive tasks such as video editing.

We were impressed by the variety of computers we received. In this test you'll find everything from a tiny, portable PC to powerhouse notebooks. Whatever you need from your notebook, we'll help you find it – and at a surprisingly low price.

Seth Barton

Notebooks and video expert

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BEST EVER NOTEBOOKS

Choosing a... Widescreen Notebook

The nine notebooks in this test all have widescreen displays, but in many other respects they're a varied bunch. Read our buying guide to find out what kind of widescreen notebook will be best for you.

WIDE OPEN SPACE

There are three different sizes of display in this group. Most have a 15.4" screen with a resolution of 1,280x800 pixels. These are well suited for watching DVDs. The AJP and Hi-Grade notebooks use slightly smaller 14" displays with a resolution of 1,280x768.

MV's Mobius 2.0M has a small chassis, so it uses a small 12.1" display. This has the same resolution of 1,280x800 pixels, though. Mesh's Dynamo 1470 is unusual, as it has a 15.4" screen with a huge 1,680x1,050 pixel resolution.

Around half the notebooks in the group have gloss-coated screens. These improve contrast, making colours richer and blacks inkier, so they're ideal for watching DVDs or looking at photos. The downside is that they are very reflective, so office strip lights can become annoying and working outside is problematic. As a rule, choose a gloss screen for home use and a non-gloss screen for office and mobile use.

Some of the notebooks have built-in webcams for use in chat sessions or videoconferencing. These are far more convenient than external webcams, but ask yourself if you'll actually use them.

SPEAKING UP

If you want to listen to music or play games, a decent set of notebook speakers can be useful. While they'll never match good headphones or separate speakers for quality, they are always there, whether you're out in the garden for the afternoon or stuck in a hotel overnight. The best speakers in this test belong to the Toshiba Satellite, which also has a useful set of audio controls.

BASIC INPUT

It is essential for a notebook to have accurate and comfortable input devices. The keyboard must be well laid out with decent-sized keys. The keys themselves must be firm to the touch and have both depth of travel and decent feedback. A poor keyboard makes typing difficult, tiring and slow – and can't be replaced.

The touch pad is also important. It must be accurate, and the buttons must be responsive. Our reviews explain which notebooks have good keyboards and touch pads and which don't come up to scratch.

Portable computing doesn't mean you have to sit hunched over your notebook, squinting at the screen. We test nine widescreen PCs that give you the bigger picture

This month

Acer Travelmate 4202 WLMi

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HP Pavilion dv5094EA

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Mesh Dynamo 1470

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MV Mobeus 2.0M

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Toshiba Satellite M70-144

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◀ Mesh's Dynamo has a screen resolution of 1,680x1,050 pixels. This gives you over 70 per cent more desktop space than the other notebooks here

SOCKET AND SEE

Many people opt for an external mouse when using their notebook computer on a desk. Add a keyboard, an MP3 player and a digital camera, and you'll be using up four USB ports already.

The best notebooks in our test have four USB ports, while the rest have a more limiting three. Keep an eye out for memory card readers. If you can find a notebook that reads the type of card used by your camera you can save time and keep a USB port free for other uses.

FireWire ports are common, and are useful for working with a digital video camera. In this group every notebook except Acer's Travelmate supports FireWire.

POWER TRIP

Some notebooks never get any further away from a desk than the kitchen or garden, but others need to be able to travel as far as their jet-setting owners. It's vital to consider how portable your notebook needs to be.

If it's to live a life of luxury in the home, we recommend a larger notebook such as the HP Pavilion or Toshiba Satellite. These have big screens and comfortably large keyboards. If you need to travel, however, look for a small notebook with a powerful battery, such as MV's Mobeus. The Acer Travelmate is a good compromise between the two, as it fits a big 15.4" display into a slim chassis.

TASK MASTER

If you need to take on complicated computing jobs, you'll want a powerful notebook. All the notebooks in this group are more than capable of performing day-to-day tasks such as MP3 encoding, running office applications and web surfing. Only a few, however, would be a good choice for demanding jobs such as video encoding. Acer and Hi-Grade have used dual-core processors in their notebooks, which can speed up certain tasks dramatically, while HP and MV have used powerful single-core processors.

If you want to play 3D games, keep a careful eye on our Doom 3 benchmarks. Only a handful of the notebooks in this group are capable of running modern 3D games, and only Mesh's Dynamo has the power to do so with a decent level of graphical detail.

WHAT'S IN STORE

Hard disk sizes in this group range from a roomy 60GB up to a huge 100GB. Whichever notebook you choose, you won't be short of storage space for some time. If you intend to accumulate a huge collection of files, though, you'd do well to choose HP's Pavilion with its 100GB disk.

All the notebooks here have DVD writers fitted so you can save backup data to DVD discs or burn your own home movie masterpiece. Every notebook supports at least one type of two-layer disc, so you can pack 8.5GB of data on a single disc.



ACER Travelmate 4202 WLMi

★★★★★

£770 inc VAT

Acer's Travelmate 4202 WLMi uses one of Intel's new Core Duo processors, and has a slim and well-designed chassis.

FEATURES

The Travelmate is the slimmest and lightest notebook in this group to have a 15.4" display. Its battery ran for over three-and-a-half hours, making it the best big-screen notebook here for use on the move.

The display itself is very good, and is bettered only by that of the HP Pavilion. It has a very slight graininess, but it's bright and produces an impressively clean white. This screen doesn't have a gloss coating, so it's ideal for use in the office or outdoors.

Below the display is a keyboard with a gently curved layout. The keys themselves are fairly good, but slightly lacking in resistance. The touch pad below is big and accurate with good buttons. The chassis has four USB ports, but no memory card reader or FireWire port.

PERFORMANCE

With two 1.66GHz processing cores, the Core Duo T2300 processor powered the Travelmate to first place in PCMark04 with a score of 4,409. In our new *Shopper* benchmarks it did slightly less well, scoring 103. This is because it suffered slightly in the memory-hungry image test. Computers with 1GB of memory, such as the MV Mobeus, performed better.

The Travelmate was also outperformed by the Mobeus and Pavilion in our audio-ripping test. This is a single-threaded application, so the Travelmate was able to use only one of its processor cores. Its integrated graphics chip failed to run our Doom 3 test, so this notebook is not suitable for playing modern games.

VERDICT

The Acer's new dual-core processor is useful in multithreaded applications. The Travelmate is a good choice if you want a notebook with a large screen for work on the move.

SUMMARY

- ✓ Dual-core processor
- ✓ Good battery life
- ✗ No FireWire port or memory card reader

WIDESCREEN NOTEBOOK 1.66GHz Intel Core Duo T2300, 512MB RAM, 60GB hard disk, Intel GMA 950 integrated graphics, DVD+/-RW DL, 15.4" widescreen LCD
SUPPLIER www.acernotebooks.co.uk, 08701 670819
DETAILS www.acer.com



AJP M540G-E+

★★★★

£845 inc VAT

The AJP M540G-E+ is a slender notebook with plenty of ports. Unfortunately, it struggles to keep up with the cheaper Acer Travelmate in terms of performance and design.

FEATURES

AJP's M540G-E+ has plenty of inputs and outputs. Four USB ports are conveniently located, with two on either side of the chassis. There's an S/PDIF audio output and a FireWire port, too. A useful memory card reader with support for SD, MMC and MS cards sits just below the touch pad, and the large 80GB hard disk gives you plenty of room for video files.

The touch pad itself is poor. It's inaccurate, and feels skittish and jumpy. The buttons below have little audible or physical feedback to tell you when you have clicked. The keyboard has a spacious layout, but the keys themselves don't have much travel.

The 14" display has a resolution of 1,280x768. The glossy screen coating makes it great for watching DVDs or viewing photos, but it's not ideal for use in a brightly lit office. It performed well in our tests, producing a bright white and a smooth greyscale. It is easily the best of the smaller displays in the group.

PERFORMANCE

The M540G is one of four notebooks in the group that use Intel's Pentium M 740 processor. This is easily powerful enough to deal with any day-to-day computing task. Its score of 76 in our benchmarks is extremely close to that of the similarly specified Evesham, Toshiba and Asus notebooks.

The M540G-E+ is well suited to mobile use, weighing only 2.4kg and with a respectable battery life of just over three hours. It failed our Doom 3 3D test, though, so isn't suited to playing games.

VERDICT

Despite its excellent display and profusion of ports, we can't recommend the M540G-E+. The frustration caused by its terrible touch pad easily outweighs its advantages.

SUMMARY

- ✓ Good display
- ✗ Average performance
- ✗ Poor touch pad

WIDESCREEN NOTEBOOK 1.73GHz Intel Pentium M 740, 512MB RAM, 80GB hard disk, Intel GMA 900 integrated graphics, DVD+/-RW +/-DL, 14" widescreen LCD
SUPPLIER AJP 08707 207911
DETAILS www.ajp.co.uk



ASUS A6VM-Q009H

★★★★★

£799 inc VAT

With the lid closed you'd be forgiven for thinking that Asus's A6VM-Q009H is in the wrong group, as the depth of its chassis is large enough to support a standard ratio display.

FEATURES

Five buttons control the A6VM-Q009H's direct CD system. This allows you to play audio CDs without booting up Windows. Unfortunately, the speakers are placed facing the desk, compounding their muffled sound.

Open the lid and there's lots of space to rest your palms while typing. The keyboard is very solid and the keys have decent feedback. Below is a large, accurate touch pad.

The 15.4" gloss-coated display is one of the best screens in the group, equalling the Acer Travelmate in our tests. Its pure white screen wasn't incredibly bright, but it had no tint or backlighting problems. The colour test looked great, and the greyscale test was well balanced.

The chassis is well built and includes a Bluetooth connectivity option, and Asus also provides an excellent two-year warranty. There's also a good selection of ports, including IR, FireWire and a memory card reader. The battery ran for almost two-and-a-half hours in our test, so the A6VM-Q009H is capable of short trips into the garden.

PERFORMANCE

An Intel Pentium M 740 processor places the A6VM alongside the AJP M540G-E+ and other similarly specified notebooks, with a score of 75 overall in our benchmarks.

The A6VM-Q009H uses nVidia's new GeForce Go 7300 graphics chipset, but it was outclassed by the older GeForce Go 6600 chip used by Mesh. It ran our Doom 3 test at 11fps, so you'll be able to play modern games with reduced graphical quality settings.

VERDICT

A deep chassis and good input devices make the A6VM comfortable to use. It's a well-built notebook for home use but it suffers by comparison to the HP Pavilion.

SUMMARY

- ✓ Good display and decent 3D graphics
- ✓ Two-year warranty
- ✗ Average performance

WIDESCREEN NOTEBOOK 1.73GHz Intel Pentium M 740, 512MB RAM, 60GB hard disk, 64MB nVidia GeForce Go 7300, DVD+/-RW DL, 15.4" widescreen LCD
SUPPLIER www.laptopsdirect.co.uk, 08701 670818
DETAILS <http://uk.asus.com>



EVESHAM Voyager C510

★★★★

£799 inc VAT

The Voyager's boxy chassis isn't particularly attractive, but it has a dedicated graphics chip and plenty of ports.

FEATURES

The Voyager's chassis is compact for a notebook with a 15.4" widescreen display. There's a wide selection of ports on the sides, including four USB ports and a DVI output. A memory card reader on the front supports the common SD, MMC and MS formats, and there's also an S/PDIF audio output.

The touch pad is small but accurate. Below is a single button that feels indistinct in use. The keyboard is much better, with a good layout and enough feedback for our liking. A good set of speakers is positioned on either side of the keyboard.

The 1,280x800 display is also good but not excellent. It can produce a bright white screen, but this is marred by distinct graininess. It performed better in our greyscale and colour wheel tests, but it can't compete with the bright and clear screen used by HP's Pavilion. Although the Voyager's small chassis would be ideal for portable use, its battery lasted just 104 minutes in our tests.

PERFORMANCE

As one of four notebooks using the Intel Pentium M 740 processor with 512MB of RAM, the Voyager produced similar benchmarks results to the AJP, Asus and Toshiba notebooks. It scored a respectable 78 overall in our new benchmarks, and a decent 3,211 in PCMark04.

Its 3D scores were a little disappointing, however. Although it was able to run our Doom 3 test, it managed just 2.8fps. Like the notebooks with integrated graphics, it's not capable of playing the latest 3D games.

VERDICT

The Voyager has a decent screen and performs acceptably, but its battery is particularly poor. Gamers should choose the Mesh Dynamo, and others would do better with the HP Pavilion, Acer Travelmate or MV Mobeus.

SUMMARY

- ✓ Compact chassis
- ✗ Average performance
- ✗ Poor battery

WIDESCREEEN NOTEBOOK 1.73GHz Intel Pentium M 740, 512MB RAM, 60GB hard disk, 128MB nVidia GeForce Go 6200, DVD+/-RW +/-DL, 15.4" widescreen LCD
SUPPLIER Evesham Technology 08701 609500
DETAILS www.evesham.com



HI-GRADE Notino D2400

★★★

£799 inc VAT

Like Acer's Travelmate, the Hi-Grade Notino uses an Intel Core Duo T2300 processor. Its chassis is very attractive, but unfortunately it's spoilt by a number of key failings.

FEATURES

The Notino's stylish black chassis is slim and weighs only 2.5kg. It has four USB ports and a memory card reader with support for SD, MMC and MS cards. The keyboard has a very light action with little resistance when you click the keys, and we found that typing for long periods was very tiring. The touch pad is smooth and accurate, but the buttons are unresponsive. We were never sure whether the buttons had clicked or not, and this made using Windows applications frustrating.

The 14" display has a resolution of 1,280x768. Its gloss coating increases contrast, but our white screen test wasn't bright enough and was further let down by a distinct greenish tint. Colours appeared muted, but contrast levels are reasonable and greyscales were displayed smoothly. It will suffice for office work, but there are better displays for multimedia use. The speakers aren't great, either, sounding flat and muffled.

Inside there's a large 80GB hard disk. Unfortunately, the battery ran for just 107 minutes in our test.

PERFORMANCE

The Intel Core Duo T2300 processor has two cores, each running at 1.66GHz. It performed well in our video-encoding test, but was less successful in the memory-intensive image-manipulation test. It scored an impressive 104 overall. Its integrated graphics chip couldn't run our Doom 3 test, though, so this notebook isn't suitable for playing recent 3D games.

VERDICT

The Notino is compact and powerful, but its keyboard and touch pad are irritating and its battery is poor. If you want the advantages of a dual-core processor, we recommend the Acer Travelmate instead.

SUMMARY

- ✓ Dual-core processor
- ✗ Terrible input devices
- ✗ Poor battery

WIDESCREEEN NOTEBOOK 1.66GHz Intel Core Duo T2300, 512MB RAM, 80GB hard disk, Intel GMA 950 integrated graphics, DVD+/-RW DL, 14" widescreen LCD
SUPPLIER Hi-Grade 020 8532 6111
DETAILS www.hi-grade.com



HP Pavilion dv5094EA

★★★★★

£799 inc VAT



The Pavilion's bulky chassis makes it less than ideal for use on the move. If you want a computer for your home, however, its brilliant display and great input devices make it a great choice.

FEATURES

The first thing that strikes you about the Pavilion is its display. It has a 15.4" screen with a resolution of 1,280x800 and a gloss coating. It produces plenty of contrast and excelled in our white screen and colour wheel tests.

The chassis is well built but weighs over 3kg. There are only three USB ports on the chassis, but there is also a memory card reader with support for SD, MMC, MS, SM and xD cards. Inside the chassis is a huge 100GB hard disk, ideal for storing lots of photos or videos. The Pavilion is a bit heavy for extended use on the move, but its battery lasted over three hours in our tests.

The touch pad is wide and slender. It's very accurate, and has a handy scroll area on the right. The buttons below are large and provide good feedback. The keyboard feels as solid as the chassis, with a good layout and well-spaced keys. It's a joy to type on.

PERFORMANCE

HP's AMD Turion 64 ML-37 processor is the only non-Intel chip in the test. It runs at a speedy 2GHz and is aided by 1GB of RAM. It lagged behind the dual-core chips in our video-encoding test but excelled in the memory-hungry image test, and scored 98 overall.

Like many other notebooks in the group, the Pavilion uses an integrated graphics chipset. Its Mobility Radeon Xpress 200 chip produced just 2.5fps in our Doom 3 test, so it's not suitable for playing recent 3D games.

VERDICT

The Pavilion is powerful, with a superb display, large hard disk and an impressive keyboard. It's a great notebook for home use. Unless you want to play 3D games or you need a dual-core processor, this is the one to buy.

SUMMARY

- ✓ Great display
- ✓ Huge hard disk
- ✗ Chassis fairly big and heavy

WIDESCREEEN NOTEBOOK 2.0GHz AMD Turion 64 ML-37, 1GB RAM, 100GB hard disk, ATI Mobility Radeon Xpress 200 integrated graphics, DVD+/-RW DL, 15.4" widescreen LCD
SUPPLIER HP 08452 704215
DETAILS www.hp.com/uk



MESH Dynamo 1470



£799 inc VAT

The Dynamo has a great display and is capable of playing modern 3D games. Unfortunately, its slow application performance and poor battery life make it unsuitable for many other tasks.

FEATURES

The Dynamo's display has a massive resolution of 1,680x1,050. It produces crisp text and bold colours. This display is particularly well suited to viewing and manipulating digital photos.

The keyboard below is very spacious, with decent gaps between the keys that aid typing speed and accuracy. The action of the keys is positive and there is plenty of travel as well. The touch pad is large and very accurate.

The chassis is large, but has only three USB ports. Fortunately, there's a memory card reader with support for SD, MMC and MS cards. The speakers are rather average, distorting at higher volumes, so gamers should opt for headphones or external speakers.

A switch on the front of the notebook allows you to select between the GeForce Go 6600 graphics processor and an integrated graphics chip. Using the integrated graphics conserves battery power, and the Dynamo ran for over two-and-a-half hours in this mode.

PERFORMANCE

With the GeForce Go 6600 graphics enabled, the Dynamo is the only notebook here that's really suitable for playing 3D games. It ran our tough Doom 3 test at a playable 27.8fps. We also tested it using Call of Duty 2 and found that it ran with the graphical settings reduced.

Unfortunately, the Dynamo consistently produced the lowest Windows application benchmark scores in the group. With a slow Celeron M processor, it scored just 64 overall. It will manage day-to-day jobs such as office applications, but it's not a good choice if you want to encode video files regularly.

VERDICT

The Dynamo is slow in Windows applications. If you want an inexpensive notebook to play 3D games, though, it's an excellent choice.

SUMMARY

- ☒ Very high-resolution display
- ☒ Good 3D performance
- ☒ Poor application performance

WIDESCREEN NOTEBOOK 1.5GHz Intel Celeron M 370, 512MB RAM, 60GB hard disk, 256MB nVidia GeForce Go 6600 graphics, DVD+/-RW +/-DL, 15.4" widescreen LCD
SUPPLIER Mesh Computers 08700 464747
DETAILS www.meshcomputers.com



MV Mobeus 2.0M



£822 inc VAT

The Mobeus's small chassis belies its impressive performance. If you need to work on the move, this pocket rocket will prove itself invaluable.

FEATURES

MV's tiny chassis is easily the smallest in the group, but its 12.1" display has the same 1,280x800 resolution as larger 15.4" screens. This means you get all the detail and desktop space of a larger display, if your eyes are sharp enough. The screen suffered from a blue tint in our white tests and a lack of subtlety in colours, however, so it's not really suited to photo editing.

The keyboard has been squeezed in quite successfully. The return key is a little small, but with practice you'll soon get used to it. The touch pad is also small. It isn't very accurate, but it's not nearly as bad as that of the AJP.

At first there appear to be only two USB ports, but closer inspection found a third under a cover. The memory card reader supports SD, MMC and MS cards. A small notebook such as this is pointless without an excellent battery. Fortunately the Mobeus impressed us by running for an amazing four-and-a-half hours in our light usage test.

PERFORMANCE

The Mobeus performed well in our tests, scoring a fantastic 114 in our new *Shopper* benchmarks. This high score is largely due to the generous 1GB of memory included, but it also helps that the processor has been overclocked slightly from 2.0GHz to 2.2GHz.

In PCMark04, which is less influenced by the amount of available memory, it managed a very respectable score of 3,689. Its integrated graphics chip couldn't run our Doom 3 test, so the Mobeus is unsuitable for playing modern 3D games.

VERDICT

The Mobeus is a well-designed compact notebook with lots of power in Windows tasks and plenty of battery life. It's a brilliant notebook if you want to work on the move.

SUMMARY

- ☒ Compact chassis
- ☒ Excellent battery
- ☒ Small display

WIDESCREEN NOTEBOOK 2.2GHz Intel Pentium M 755, 1GB RAM, 60GB hard disk, Intel GMA 900 integrated graphics, DVD+/-RW +/-DL, 12.1" widescreen LCD
SUPPLIER MV 08718 554668
DETAILS www.go-mv.com



TOSHIBA Satellite M70-144



£799 inc VAT

The Toshiba Satellite looks stylish and sounds great. It performs reasonably well, but its battery is particularly poor.

FEATURES

The Satellite is the best notebook in the group for audio. Its speakers are well balanced and fairly loud, and there's a useful pseudo-surround-sound option for watching films and a handy volume control dial on the front.

Some of the vital keys on the right-hand side of the keyboard are a little small for our liking. Fortunately the keys are good, with plenty of depth and feedback. The touch pad is small but accurate. The buttons below merge into the notebook's design, but they work well once you've found them.

The 15.4" display isn't bad, but there are better ones in the group. Its whites aren't quite bright enough and colours look similarly muted, but it passed our greyscale tests. The gloss coating makes blacks look dark and inky.

The chassis feels sturdy, and five blue indicators on the front edge add to its stylish looks. There are only three USB ports, but a memory card is included that supports SD, MS and xD cards. The Satellite ran for just 82 minutes in our battery life test, so it's useless for working on the move.

PERFORMANCE

Like many notebooks in this group, the Satellite uses an Intel Pentium M 740 processor and 512MB of RAM. It scored a respectable 78 overall in our tough new benchmarks.

It comes equipped with an ATI Mobility Radeon X600 SE graphics chipset. This ran our Doom 3 test at 11fps. The Satellite will play modern 3D games at reduced detail settings, but keen gamers would be better off with Mesh's Dynamo.

VERDICT

With great speakers and the ability to play 3D games, the Satellite will appeal to some people. Its screen isn't great, though, and its battery life is terrible.

SUMMARY

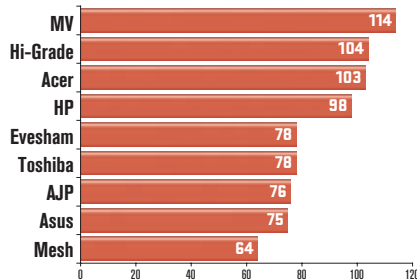
- ☒ Great speakers
- ☒ Decent 3D graphics
- ☒ Terrible battery life

WIDESCREEN NOTEBOOK 1.73GHz Intel Pentium M 740, 512MB RAM, 60GB hard disk, 256MB ATI Mobility Radeon X600 SE, DVD+/-RW +/-DL, 15.4" widescreen LCD
SUPPLIER Micro Anvika 020 7467 6050
DETAILS www.toshiba.co.uk

BENCHMARKS

2D Performance Shopper application tests and PCMark04

Overall



SETTINGS We run our application tests at the notebook's native resolution in 32-bit colour
WEB www.computershopper.co.uk

Video-Encoding Test

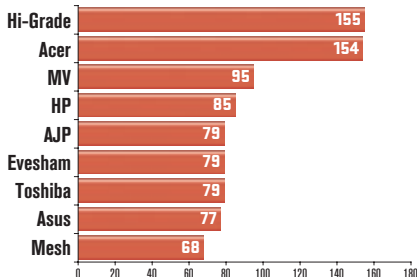
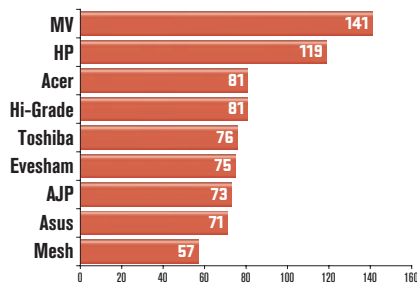


Image-Editing Test

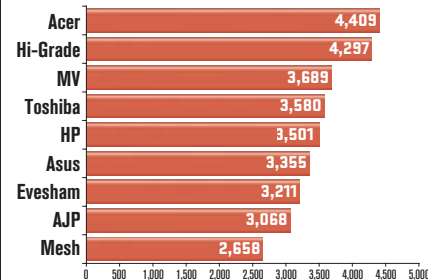


Computer Shopper's 2D benchmarks are designed to show how PCs stand up to the toughest tasks Windows can throw at them. Today's PCs have no problem running office applications such as Word and Excel, so we have chosen to focus our tests on areas where you could experience difficulties.

In the new version there are four scripts. Encoding a short video to MPEG 2 format is an extremely processor-intensive task that anyone interested in transferring home videos to DVD will have to tackle. Our image-editing test simulates a session of photo enhancement using Paint Shop Pro X, culminating with the composition of a panorama from a set of digital snaps. In our third test, a set of audio files is ripped to MP3 format. Finally, we have a multi-tasking test designed to test the real-life benefits of today's Hyper-Threaded and dual-core processors. This test compresses a DVD for playback on a Pocket PC at the same time as running our image-editing test.

Figures are relative to a reference Evesham Athlon 64 3500+, which scores 100 in all tests.

PCMark04



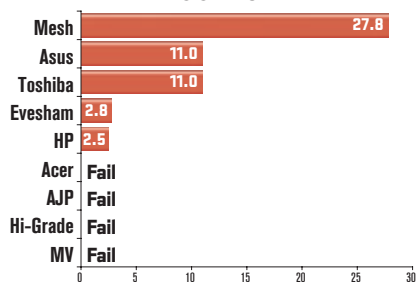
SETTINGS We run PCMark04 at the notebook's native resolution and in 32-bit colour
WEB www.futuremark.com

As well as our own benchmarks, we test all desktop and notebook PCs using Futuremark's PCMark04. You can download a free version of PCMark04 from www.futuremark.com/download, so you can compare our results with those from your own computer.

PCMark04 performs a variety of tests to measure system performance. These include testing the hard disk, memory, processor and graphics. All the tests mimic the stresses placed on your computer by actual applications, giving a fair indication of how powerful a PC is.

3D Performance Doom 3

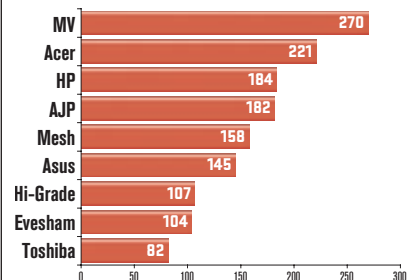
Doom 3



SETTINGS 1,024x768 resolution, high quality,
 4x AA
WEB www.doom3.com

Our Doom 3 benchmark tests whether a PC has the power needed to play cutting-edge 3D games with ease. We've made the test harder, by including more outdoor scenes in it. A good score here indicates that a PC should cope with any graphically intense 3D game coming on to the market today.

Battery life Runtime in minutes



Our new battery test involves light browser use with the display at its middle brightness setting.

Labs verdict Widescreen notebooks

People have many different reasons for using a notebook, and this month's Labs test contains several notebooks that shine in very different areas. We've picked out four that are particularly good.

The MV Mobeus 2.0M is very compact, has a fantastic battery and is also one of the fastest notebooks in the group. It's a brilliant travelling companion at a very decent price.

If you want to play games, choose Mesh's Dynamo 1470. It's not very powerful in Windows, but its graphics chip will let you enjoy the latest 3D titles.

The Acer Travelmate 4202 WLMi is slim enough for portable use, but still has a big 15.4" display. With a new Intel Core Duo T2300 processor, it's a good choice if you want to take on intensive tasks such as video editing.

For more general use, HP's Pavilion dv5094EA is the one to pick. Its glossy display is the best in the group and will make the most of your DVDs, photos and videos. With a huge hard disk, plenty of ports and a decent amount of power, it's the one that wins our Best Buy award.



HP
 Pavilion
 dv5094EA

MANUFACTURER	ACER	AJP	ASUS	EVESHAM
Model	Travelmate 4202 WLMi	M540G-E+	A6VM-Q009H	Voyager C510
Rating	★★★★★	★★★	★★★★	★★★
Processor	Intel Core Duo T2300	Intel Pentium M 740	Intel Pentium M 740	Intel Pentium M 740
Speed	1.66GHz	1.73GHz	1.73GHz	1.73GHz
Memory installed	512MB	512MB	512MB	512MB
Memory slots (free)	2 (1)	2 (1)	2 (1)	2 (1)
Max memory	2GB	2GB	2GB	2GB
BIOS	Phoenix	Phoenix	AMI	Insyde
Dimensions (HxWxD)	33x357x263mm	38x332x243mm	35x354x284mm	39x352x250mm
Weight	2.7kg	2.4kg	3.2kg	2.9kg
Sound	Realtek HD	Realtek HD	Realtek HD	Realtek AC97
Pointing device	Touch pad	Touch pad	Touch pad	Touch pad
DISPLAY				
Screen size	15.4"	14.0"	15.4"	15.4"
Graphics adaptor	Intel Graphics Media Accelerator 950	Intel Graphics Media Accelerator 900	nVidia GeForce Go 7300	nVidia GeForce Go 6200
Graphics outputs	D-sub	D-sub, S-video	D-sub, S-video	DVI, S-video
Graphics memory	256MB shared	128MB shared	64MB + 192MB shared	128MB
Native resolution	1,280x800	1,280x768	1,280x800	1,280x800
STORAGE				
Hard disk (available)	60GB (52.0GB)	80GB (74.6GB)	60GB (55.9GB)	60GB (52.6GB)
Optical drive	DVD +/-RW DL	DVD +/-RW +/-DL	DVD +/-RW DL	DVD +/-RW +/-DL
Optical drive speeds	8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 2.4X DVD+R DL, 24X CD-R, 10X CD-RW, 8X DVD-ROM, 24X CD-ROM	8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 24X CD-R, 20X CD-RW, 8X DVD-ROM, 24X CD-ROM	8X DVD+R, 8X DVD-R, 4X DVD+RW, 4X DVD-RW, 2.4X DVD+R DL, 24X CD-R, 10X CD-RW, 8X DVD-ROM, 24X CD-ROM	8X DVD+R, 8X DVD-R, 8X DVD+RW, 4X DVD-RW, 4X DVD+R DL, 4X DVD+R DL, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM
Floppy disk	No	No	No	No
PORTS & EXPANSION				
USB2 ports	4	4	4	4
FireWire	No	1	1	1
Infrared port	No	No	Yes	No
Bluetooth	No	No	Yes	No
Networking	10/100 wired, 802.11b/g	10/100/1,000 wired, 802.11a/b/g	10/100/1,000 wired, 802.11b/g	10/100 wired, 802.11b/g
PC Card slots	1	1	1	1
Modem	Yes	Yes	Yes	Yes
Legacy ports	None	None	Parallel	None
Other ports	Mini-jack S/PDIF out	Mini-jack S/PDIF out, memory card reader (supports SD, MMC, MS)	Memory card reader (supports SD, MMC, MS)	Mini-jack S/PDIF out, memory card reader (supports SD, MMC, MS)
EXTRAS				
Carrying case	No	Yes	Yes	No
Direct CD control	No	No	Yes	No
Operating system	Windows XP Home	Windows XP Home	Windows XP Home	Windows XP Home
Operating system restore option	Restore partition	Recovery disc	Recovery disc	Recovery disc
Software included	CyberLink PowerDVD	Nero Suite 6	Asus DVD XP 5.0, CyberLink PowerDirector 3.0, Medi@Show 2.0, Symantec Norton AntiVirus 2005, Nero Express 6.0, Microsoft Works 8.0	Microsoft Works 8, Roxio Easy Media Creator 7, Bullguard Anti-Virus 5, PC Angel
Other standard accessories	None	Built-in 1.3MP webcam	Built-in 1.3MP webcam, Logitech Notebook Optical Mouse +	None
Optional extras	None	Bluetooth £47 inc VAT	None	None
BUYING INFORMATION				
Company founded	1979	1986	1989	1983
Employees	6,000	35	40,000	418
Tech support staff	150+	7	6 (UK)	84
Tech support times	9am-5pm Mon-Fri	Mon-Fri 9am-5pm, Sat 9am-2pm	8.30am-5.30pm Mon-Fri	9am-5.30pm Mon-Sat
Parts and labour warranty	One year RTB	One year RTB	Two years collect and return	One year RTB
Price inc VAT	£770 ex delivery	£845 inc delivery	£799 ex delivery	£799 inc delivery
Price ex VAT	£655	£680	£680	£680
Details	www.acer.com	www.ajp.co.uk	http://uk.asus.com	www.evesham.com
Supplier	Acer Notebooks	AJP	Laptops Direct	Evesham Computers
Phone	08701 670819	08707 207911	08701 670818	08701 609500
Web address	www.acernotebooks.co.uk	www.ajp.co.uk	www.laptopsdirect.co.uk	www.evesham.com



HI-GRADE	HP	MESH	MV	TOSHIBA
Notino D2400	Pavilion dv5094EA	Dynamo 1470	Mobeus 2.0M	Satellite M70-144
★★	★★★★★	★★★★	★★★★★	★★★★
Intel Core Duo T2300	AMD Turion 64 ML-37	Intel Celeron M 370	Intel Pentium M 755	Intel Pentium M 740
1.66GHz	2.0GHz	1.5GHz	2.2GHz	1.73GHz
512MB	1GB	512MB	1GB	512MB
1 (1)	2 (0)	2 (0)	2 (0)	2 (1)
1.5GB	2GB	2GB	2 GB	2GB
AMI	Phoenix	AMI	AMI	Phoenix
33x334x242mm	37x357x264mm	38x356x269mm	36x289x227mm	38x356x260mm
2.5kg	3.1kg	3.3kg	2.1kg	2.9kg
Realtek HD audio	Conexant AMC	Realtek HD	Vinyl AC97	Realtek AC97
Touch pad	Touch pad	Touch pad	Touch pad	Touch pad
14.0"	15.4"	15.4"	12.1"	15.4"
Intel Graphics Media Accelerator 950	ATI Mobility Radeon Xpress 200	nVidia GeForce Go 6600	Intel Graphics Media Accelerator 900	ATI Mobility Radeon X600 SE
D-sub	D-sub, S-video	D-sub, S-video	D-sub, S-video	D-sub, S-video
128MB shared	128MB	256MB	64MB shared	256MB
1,280x768	1,280x800	1,680x1,050	1,280x800	1,280x800
80GB (74.5GB)	100GB (92.9GB)	60GB (51.9GB)	60GB (51.6GB)	60GB (55.9GB)
DVD +/-RW DL	DVD +/-RW DL	DVD +/-RW +/-DL	DVD +/-RW +/-DL	DVD +/-RW +/-DL
8X DVD+R, 8X DVD-R, 4X DVD+RW, 4X DVD-RW, 2.4X DVD+R DL, 24X CD-R, 10X CD-RW, 8X DVD-ROM, 24X CD-ROM	8X DVD+R, 8X DVD-R, 4X DVD+RW, 4X DVD-RW, 2.4X DVD+R DL, 24X CD-R, 10X CD-RW, 8X DVD-ROM, 24X CD-ROM	8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 24X CD-R, 20X CD-RW, 8X DVD-ROM, 24X CD-ROM	8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 24X CD-R, 20X CD-RW, 8X DVD-ROM, 24X CD-ROM	8X DVD+R, 8X DVD-R, 4X DVD+RW, 4X DVD-RW, 2.4X DVD+R DL, 2.4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM
No	No	No	No	No
4	3	3	3	3
1	1	1	1	1
No	No	No	No	No
No	No	No	No	No
10/100/1,000 wired, 802.11b/g	10/100 wired, 802.11b/g	10/100/1,000 wired, 802.11b/g	10/100 wired, 802.11b/g	10/100 wired, 802.11b/g
1	1	1	1	1
Yes	Yes	Yes	Yes	Yes
None	None	None	None	None
Memory card reader (supports SD, MMC, MS)	Memory card reader (supports SD, MMC, MS, SM, xD), HP expansion port	Memory card reader (supports SD, MMC, MS)	Memory card reader (supports SD, MMC, MS)	Memory card reader (supports SD, MS, xD)
Yes	No	Yes	Yes	No
No	No	No	No	No
Windows XP Home	Windows XP Home	Windows XP Home	Windows XP Home	Windows XP Home
Restore partition	Recovery disc	Windows disc	Restore partition	Recovery disc
BullGuard Anti-Virus 3, Sonic RecordNow 7, Sonic Cineplayer 1.5	Microsoft Works 8.0, InterVideo WinDVD 5.0, Sonic Digital MediaPlus 7.0, Symantec Norton Internet Security 2005	Microsoft Works 8.5, CyberLink Power2Go 4, PowerProducer 3, PowerDirector 3, PowerBackup 1.1, PowerCinema 4, Medi@Show 3	Roxio Creator Suite 7; Microsoft Works 8; BullGuard Anti-Virus, Firewall and 100MB online backup 5.1	Microsoft OneNote 2003 11, Sonic Record Now! 7, InterVideo WinDVD Creator 2 Platinum, InterVideo WinDVD, Norton Internet Security 2005
Built-in 1.3MP webcam	None	None	None	None
None	None	Extra battery £70 inc VAT	Bluetooth £24 inc VAT	None
1986	1939	1987	1992	Notebook division: 1985
85	140,000	275	51	Not disclosed
10	Not disclosed	42	10	Not disclosed
9am-5.30pm Mon-Fri	8am-6pm Mon-Fri	9am-5.30pm Mon-Fri	9am-5pm Mon-Fri, 10am-2pm Sat	8am-6pm Mon-Fri
One year collect and return	One year collect and return	One year collect and return	One year RTB	One year collect and return
£799 inc delivery	£799 ex delivery	£799 inc delivery	£822 inc delivery	£799 ex delivery
£680	£680	£680	£680	£680
www.hi-grade.com	www.hp.com/uk	www.meshcomputers.com	www.go-mv.com	www.toshiba.co.uk
Hi-Grade	HP	Mesh Computers	MV	Micro Anvika
020 8532 6111	08452 704215	08700 464747	0871 855 4668	020 7467 6050
www.hi-grade.com	www.hp.com/uk	www.meshcomputers.com	www.go-mv.com	www.microanvika.com